AMENDATORY SECTION (Amending Order 99-24, filed 1/10/03, effective 2/10/03)

WAC 173-350-020 Applicability. This chapter applies to facilities and activities that manage solid wastes as that term is defined in WAC 173-350-100. This chapter does not apply to the following:

(1) Overburden from mining operations intended for return to the mine;

(2) Wood waste used for ornamental, animal bedding, mulch and plant bedding, or road building purposes;

(3) Wood waste directly resulting from the harvesting of timber left at the point of generation and subject to chapter 76.09 RCW, Forest practices;

(4) Land application of manures and crop residues at agronomic rates;

(5) Agricultural composting when all agricultural wastes are generated, processed, and applied on-farm at agronomic rates in accordance with accepted agricultural practices. This categorical exemption does not apply to producers subject to RCW 70.95.306, composting of bovine and equine carcasses;

(6) Mushroom substrate production when materials that are not solid waste (such as processed chicken manure) are used in the production;

(7) Home composting as defined in WAC 173-350-100;

((~~(6)~~)) (8) Single-family residences and single-family farms whose year round occupants engage in solid waste disposal regulated under WAC 173-351-700(4);

((~~(7)~~)) (9) Clean soils and clean dredged material as defined in WAC 173-350-100;

((~~(8)~~)) (10) Dredged material as defined in 40 C.F.R. 232.2 that is subject to:

(a) The requirements of a permit issued by the U.S. Army Corps of Engineers or an approved state under section 404 of the Federal Water Pollution Control Act (33 U.S.C. 1344);

(b) The requirements of a permit issued by the U.S. Army Corps of Engineers under section 103 of the Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413); or

(c) In the case of U.S. Army Corps of Engineers civil works projects, the administrative equivalent of the permits referred to in (a) and (b) of this subsection, as provided for in U.S. Army Corps of Engineers regulations, including, for example, 33 C.F.R. 336.1, 336.2, and 337.6;

((~~(9)~~)) (11) Biosolids that are managed under chapter 173-308 WAC, Biosolids management;

((~~(10)~~)) (12) Domestic septage taken to a sewage treatment plant permitted under chapter 90.48 RCW, Water pollution control;

((~~(11)~~)) (13) Liquid wastes, the discharge or potential

discharge of which, is regulated under federal, state or local water pollution permits;

((~~(12)~~)) (14) Domestic wastewater facilities and industrial wastewater facilities otherwise regulated by federal, state, or local water pollution permits;

((~~(13)~~)) (15) Dangerous wastes fully regulated under chapter 70.105 RCW, Hazardous waste management, and chapter 173-303 WAC, Dangerous waste regulations;

((~~(14)~~)) (16) Special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards;

((~~(15)~~)) (17) PCB wastes regulated under 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions, except for:

(a) PCB household waste; and

(b) PCB bulk product wastes identified in 40 C.F.R. Part 761.62 (b)(1) that are disposed of in limited purpose landfills;

((~~(16)~~)) (18) Radioactive wastes, defined by chapter 246-220 WAC, Radiation protection--General provisions, and chapter 246-232 WAC, Radioactive protection--Licensing applicability;

((~~(17)~~)) (19) Landfilling of municipal solid waste regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills;

((~~(18)~~)) (20) Drop boxes used solely for collecting recyclable materials;

((~~(19)~~)) (21) Intermodal facilities as defined in WAC 173-350-100; and

((~~(20)~~)) (22) Solid waste handling facilities that have engaged in closure and closed before the effective date of this chapter.

AMENDATORY SECTION (Amending Order 99-24, filed 1/10/03, effective 2/10/03)

WAC 173-350-030 Effective dates. (1) *Effective dates.* These standards apply to all facilities, except existing facilities, ((~~upon the effective date of this chapter~~)) when updated or new sections in this chapter become effective.

(2) *Effective dates - Existing facilities.*

(a) The owner or operator of existing facilities ((~~shall~~)) must:

(i) Meet all applicable operating, environmental monitoring, closure and post-closure planning, and financial assurance requirements of this chapter within ((~~twenty-four~~)) twelve months of the effective date of updated or new sections in this chapter; and

(ii) Meet all applicable performance and design requirements, other than location or setback requirements, within ((~~thirty-six~~)) eighteen months of the effective date of updated or new sections in

this chapter.

(b) These standards apply to all new solid waste handling units at existing facilities upon the effective date of this chapter.

(c) The owner or operator of existing facilities ((~~shall~~)) must initiate the permit modification process outlined in WAC 173-350-710(4) within ((~~eighteen~~)) twelve months after the effective date of updated or new sections in this chapter. If a permit modification is necessary, every application for a permit modification ((~~shall~~)) must describe the date and methods for altering an existing facility to meet (a)(i) ((~~through (iii)~~)) and (ii) of this subsection.

(d) The jurisdictional health department ((~~shall~~)) must determine if a new permit application is required based on the extent of the changes needed to bring the facility into compliance.

(e) ((~~An existing facility completing closure within twelve months of the effective date of this chapter may close in compliance with the requirements of chapter 173-304 WAC, Minimum functional standards for solid waste handling. Any facility that does not complete closure within twelve months of the effective date of this chapter shall~~)) All facilities must close in compliance with applicable requirements of this chapter.

AMENDATORY SECTION (Amending Order 04-12, filed 5/10/05, effective 6/10/05)

WAC 173-350-100 Definitions. When used in this chapter, the following terms have the meanings given below.

"Active area" means that portion of a facility where solid waste recycling, reuse, treatment, storage, or disposal operations are being, are proposed to be, or have been conducted. Setbacks ((~~shall~~)) must not be considered part of the active area of a facility.

"Aerobic decomposition" means decomposition of organic materials primarily by aerobic microbes under controlled conditions.

"Agricultural composting" means composting of agricultural waste as an integral component of a system designed to improve soil health and recycle agricultural wastes. Agricultural composting is conducted on lands used for farming.

"Agricultural wastes" means wastes on farms resulting from the raising or growing of plants and animals including, but not limited to, crop residue, manure ((~~and~~)) from herbivores and nonherbivores, animal bedding, and carcasses of dead animals ((~~weighing each or collectively in excess of fifteen pounds~~)).

"Agronomic rates" means the application rate (dry weight basis) that will provide the amount of nitrogen or other critical nutrient required for optimum growth of vegetation, and that will

not result in the violation of applicable standards or requirements for the protection of ground or surface water as established under chapter 90.48 RCW, Water pollution control and related rules including chapter 173-200 WAC, Water quality standards for groundwaters of the state of Washington, and chapter 173-201A WAC, Water quality standards for surface waters of the state of Washington.

"Air quality standard" means a standard set for maximum allowable contamination in ambient air as set forth in chapter 173-400 WAC, General regulations for air pollution sources.

"Anaerobic digester" means an enclosed vessel or container that processes organic material into biogas and digestate through microbial decomposition under anaerobic (low oxygen) conditions.

"Below ground tank" means a device meeting the definition of "tank" in this chapter where a portion of the tank wall is situated to any degree within the ground, thereby preventing visual inspection of that external surface of the tank that is in the ground.

"Beneficial use" means the use of solid waste as an ingredient in a manufacturing process, or as an effective substitute for natural or commercial products, in a manner that does not pose a threat to human health or the environment. Avoidance of processing or disposal cost alone does not constitute beneficial use.

"Biofilter" means a bed or layer of material that supports beneficial microorganisms, typically a mixture of compost and wood chips, designed to filter and treat air emissions. A biofilter adsorbs and then biologically degrades odorous compounds.

"Biosolids" means municipal sewage sludge that is a primarily organic, semisolid product resulting from the wastewater treatment process, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management. Biosolids includes a material derived from biosolids and septic tank sludge, also known as septage, that can be beneficially recycled and meets all applicable requirements under chapter 173-308 WAC, Biosolids management.

"Buffer" means a permanently vegetated strip adjacent to an application area, the purpose of which is to filter runoff or overspray from the application area and protect an adjacent area.

"Bulking agent" means an ingredient used to improve structure and porosity, or to lower moisture content, primarily in composting. Bulking agents improve convective air flow and reduce settling and compaction. Bulking agents may include, but are not limited to, clean wood waste, straw, and other high-carbon materials.

"Cab cards" means a license carried in a vehicle that authorizes that vehicle to legally pick up waste tires and haul to a permitted, licensed facility or an exempt facility for deposit.

"Capacity" means the maximum amount of material that can be contained. Capacity is identified by the conditions of exemption, the permit, or the plan of operations as approved by the jurisdictional health department or the department. All material includes, but is not limited to, incoming waste, feedstocks,

stockpiled wastes, active composting, curing piles, composted materials, and sorted recyclable materials on-site.

"Captive insurance companies" means companies that are wholly owned subsidiaries controlled by the parent company and established to insure the parent company or its other subsidiaries.

"Channel migration zone" means the lateral extent of likely movement of a stream or river channel along a stream reach.

"Clean soils and clean dredged material" means soils and dredged material which are not dangerous wastes, contaminated soils, or contaminated dredged material as defined in this section.

"Closure" means those actions taken by the owner or operator of a solid waste handling facility to cease disposal operations or other solid waste handling activities, to ensure that all such facilities are closed in conformance with applicable regulations at the time of such closures and to prepare the site for the post-closure period.

"Closure plan" means a written plan developed by an owner or operator of a facility detailing how a facility is to close at the end of its active life.

"Composted material" means organic solid waste that has undergone biological degradation and transformation under controlled conditions designed to promote aerobic decomposition at a solid waste facility in compliance with the requirements of this chapter. Composting is a form of organic material recycling. Natural decay of organic solid waste under uncontrolled conditions does not result in composted material.

"Composting" means the biological degradation and transformation of organic solid waste under controlled conditions designed to promote aerobic decomposition. Natural decay of organic solid waste under uncontrolled conditions is not composting.

"Conditionally exempt small quantity generator (CESQG)" means a dangerous waste generator whose dangerous wastes are not subject to regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated or accumulated in quantities below the threshold for regulation and meets the conditions prescribed in WAC 173-303-070 (8)(b).

"Conditionally exempt small quantity generator (CESQG) waste" means dangerous waste generated by a conditionally exempt small quantity generator.

"Container" means a portable device used for the collection, storage, and/or transportation of solid waste including, but not limited to, reusable containers, disposable containers, and detachable containers.

"Contaminant" means any chemical, physical, biological, or radiological substance that does not occur naturally in the environment or that occurs at concentrations greater than natural background levels.

"Contaminate" means the release of solid waste, leachate, or gases emitted by solid waste, such that contaminants enter the environment at concentrations that pose a threat to human health or the environment, or cause a violation of any applicable

environmental regulation.

"Contaminated dredged material" means dredged material resulting from the dredging of surface waters of the state where contaminants are present in the dredged material at concentrations not suitable for open water disposal and the dredged material is not dangerous waste and is not regulated by section 404 of the Federal Clean Water Act (P.L. 95-217).

"Contaminated soils" means soils removed during the cleanup of a hazardous waste site, or a dangerous waste facility closure, corrective actions or other clean-up activities and which contain harmful substances but are not designated dangerous wastes.

"Controlled conditions" means the conditions in which facilities must be operated to meet the performance standards of WAC 173-350-040 and the applicable handling standards of this chapter. Controlled conditions at compost facilities may include, but are not limited to, controlling odors, run-on and runoff, moisture levels, pH levels, carbon to nitrogen ratios, temperatures, oxygen levels, particle sizes, and free air space.

"Corrosion expert" means a person certified by the National Association of Corrosion Engineers (NACE) or a registered professional engineer who has certification or licensing that includes education and experience in corrosion control.

"Crop residues" means vegetative material leftover from the harvesting of crops, including leftover pieces or whole fruits or vegetables, crop leaves and stems. Crop residue does not include food processing waste.

"Dangerous wastes" means any solid waste designated as dangerous waste by the department under chapter 173-303 WAC, Dangerous waste regulations.

"Department" means the Washington state department of ecology.

"Detachable containers" means reusable containers that are mechanically loaded or handled, such as a dumpster or drop box.

"Digestate" means both solid and liquid substances that remain following anaerobic digestion of organic material in an anaerobic digester.

"Disposable containers" means containers that are used once to handle solid waste, such as plastic bags, cardboard boxes and paper bags.

"Disposal" or **"deposition"** means the discharge, deposit, injection, dumping, leaking, or placing of any solid waste into or on any land or water.

"Domestic septage" means Class I, II or III domestic septage as defined in chapter 173-308 WAC, Biosolids management.

"Domestic wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of domestic wastewater together with such industrial waste as may be present.

"Drop box facility" means a facility used for the placement of a detachable container including the area adjacent for necessary entrance and exit roads, unloading and turn-around areas. Drop box facilities normally serve the general public with loose loads and receive waste from ((~~offsite~~)) off-site.

"Energy recovery" means the recovery of energy in a useable form from mass burning or refuse-derived fuel incineration, pyrolysis or any other means of using the heat of combustion of solid waste that involves high temperature (above twelve hundred degrees Fahrenheit) processing.

"Existing facility" means a facility which is owned or leased, and in operation, or for which facility construction has begun, on or before the effective date of this chapter and the owner or operator has obtained permits or approvals necessary under federal, state and local statutes, regulations and ordinances.

"Facility" means all contiguous land (including buffers and setbacks) and structures, other appurtenances, and improvements on the land used for solid waste handling.

"Facility construction" means the continuous on-site physical act of constructing solid waste handling unit(s) or when the owner or operator of a facility has entered into contractual obligations for physical construction of the facility that cannot be canceled or modified without substantial financial loss.

"Facility structures" means constructed infrastructure such as buildings, sheds, utility lines, and piping on the facility.

"Feedstock" means a source separated waste material used as a component of composting, manufacturing, or as part of an industrial process.

"Food processing waste" means a source-separated organic material that is generated by a food processing facility licensed to process food by the United States Department of Agriculture, the United States Food and Drug Administration, the Washington state department of agriculture, or other applicable regulatory agency. Food processing wastes may include, but are not limited to, sludge from food processing water treatment plants, culls, DAF (dissolved air flotation from a food processing facility), pomace, and paunch manure, not intended for animal or human consumption.

"Garbage" means ((~~animal and vegetable waste resulting from the handling, storage, sale, preparation, cooking, and serving of foods~~)) putrescible solid wastes.

"Groundwater" means that part of the subsurface water that is in the zone of saturation.

"Holocene fault" means a plane along which earthen material on one side has been displaced with respect to that on the other side and has occurred in the most recent epoch of the Quaternary period extending from the end of the Pleistocene to the present.

"Home composting" means composting of on-site generated wastes, and incidental materials beneficial to the composting process, by the owner or person in control of a single-family residence, or for a dwelling that houses two to five families, such as a duplex or clustered dwellings.

"Household hazardous wastes" means any waste which exhibits any of the properties of dangerous wastes that is exempt from regulation under chapter 70.105 RCW, Hazardous waste management, solely because the waste is generated by households. Household hazardous waste can also include other solid waste identified in the local hazardous waste management plan prepared pursuant to

chapter 70.105 RCW, Hazardous waste management.

"Hydrostratigraphic unit" means any water-bearing geologic unit or units hydraulically connected or grouped together on the basis of similar hydraulic conductivity which can be reasonably monitored; several geologic formations or part of a geologic formation may be grouped into a single hydrostratigraphic unit; perched sand lenses may be considered a hydrostratigraphic unit or part of a hydrostratigraphic unit, for example.

"Incineration" means reducing the volume of solid wastes by use of an enclosed device using controlled flame combustion.

"Incompatible waste" means a waste that is unsuitable for mixing with another waste or material because the mixture might produce excessive heat or pressure, fire or explosion, violent reaction, toxic dust, fumes, mists, or gases, or flammable fumes or gases.

"Industrial solid wastes" means solid waste generated from manufacturing operations, food processing, or other industrial processes.

"Industrial wastewater facility" means all structures, equipment, or processes required to collect, carry away, treat, reclaim, or dispose of industrial wastewater.

"Inert waste" means solid wastes that meet the criteria for inert waste in WAC 173-350-990.

"Inert waste landfill" means a landfill that receives only inert wastes.

"Intermediate solid waste handling facility" means any intermediate use or processing site engaged in solid waste handling which is not the final site of disposal. This includes material recovery facilities, transfer stations, drop boxes, baling and compaction sites.

"Intermodal facility" means any facility operated for the purpose of transporting closed containers of waste and the containers are not opened for further treatment, processing or consolidation of the waste.

"Jurisdictional health department" means city, county, city-county or district public health department.

"Land application site" means a contiguous area of land under the same ownership or operational control on which solid wastes are beneficially utilized for their agronomic or soil-amending capability.

"Land reclamation" means using solid waste to restore drastically disturbed lands including, but not limited to, construction sites and surface mines. Using solid waste as a component of fill is not land reclamation.

"Landfill" means a disposal facility or part of a facility at which solid waste is permanently placed in or on land including facilities that use solid waste as a component of fill.

"Leachate" means water or other liquid within a solid waste handling unit that has been contaminated by dissolved or suspended materials due to contact with solid waste or gases.

"Limited moderate risk waste" means waste batteries, waste oil, and waste antifreeze generated from households.

"Limited moderate risk waste facility" means a facility that collects, stores, and consolidates only limited moderate risk waste.

"Limited purpose landfill" means a landfill which is not regulated or permitted by other state or federal environmental regulations that receives solid wastes limited by type or source. Limited purpose landfills include, but are not limited to, landfills that receive segregated industrial solid waste, construction, demolition and landclearing debris, wood waste, ash (other than special incinerator ash), and dredged material. Limited purpose landfills do not include inert waste landfills, municipal solid waste landfills regulated under chapter 173-351 WAC, Criteria for municipal solid waste landfills, landfills disposing of special incinerator ash regulated under chapter 173-306 WAC, Special incinerator ash management standards, landfills regulated under chapter 173-303 WAC, Dangerous waste regulations, or chemical waste landfills used for the disposal of polychlorinated biphenyls (PCBs) regulated under Title 40 C.F.R. Part 761, Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions.

"Liquid" means a substance that flows readily and assumes the form of its container but retains its independent volume.

"Liquid waste" means any solid waste which is deemed to contain free liquids as determined by the Paint Filter Liquids Test, Method 9095, in "*Test Methods for Evaluating Solid Waste, Physical/Chemical Methods,*" EPA Publication SW-846.

"Lithified earth material" means all rock, including all naturally occurring and naturally formed aggregates or masses of minerals or small particles of older rock that formed by crystallization of magma or by induration of loose sediments. This term does not include man-made materials, such as fill, concrete or asphalt, or unconsolidated earth materials, soil or regolith lying at or near the earth's surface.

"Local fire control agency" means a public or private agency or corporation providing fire protection such as a local fire department, the department of natural resources or the United States Forest Service.

"Lower explosive limits" means the lowest percentage by volume of a mixture of explosive gases that will propagate a flame in air at twenty-five degrees centigrade and atmospheric pressure.

"Manufactured organics" means source separated solid wastes, such as nonplastic coated paper plates, cups, compostable bags, and other items designed to decompose through composting, anaerobic digestion, or through other organic materials recycling processes. Manufactured organics do not include physical contaminants such as plastics and coated paper products that will not readily decompose under typical composting conditions, or wood derived fuel or wood waste as defined in this section.

"Manure and bedding" means manure (feces) and bedding from herbivorous animals such as horses, cows, sheep, and goats.

"Material recovery facility" means any facility that collects, compacts, repackages, sorts, or processes for transport source

separated solid waste for the purpose of recycling.

"Mobile systems and collection events" means activities conducted at a temporary location to collect moderate risk waste.

"Moderate risk waste (MRW)" means solid waste that is limited to conditionally exempt small quantity generator (CESQG) waste and household hazardous waste (HHW) as defined in this chapter.

"MRW facility" means a solid waste handling unit that is used to collect, treat, recycle, exchange, store, consolidate, and/or transfer moderate risk waste. This does not include mobile systems and collection events or limited MRW facilities that meet the applicable terms and conditions of WAC 173-350-360 (2) or (3).

"Municipal solid waste (MSW)" means a subset of solid waste which includes unsegregated garbage, refuse and similar solid waste material discarded from residential, commercial, institutional and industrial sources and community activities, including residue after recyclables have been separated. Solid waste that has been segregated by source and characteristic may qualify for management as a non-MSW solid waste, at a facility designed and operated to address the waste's characteristics and potential environmental impacts. The term MSW does not include:

- Dangerous wastes other than wastes excluded from the requirements of chapter 173-303 WAC, Dangerous waste regulations, in WAC 173-303-071 such as household hazardous wastes;
- Any solid waste, including contaminated soil and debris, resulting from response action taken under section 104 or 106 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (42 U.S.C. 9601), chapter 70.105D RCW, Hazardous waste cleanup--Model Toxics Control Act, chapter 173-340 WAC, the Model Toxics Control Act cleanup regulation or a remedial action taken under those rules; nor
- Mixed or segregated recyclable material that has been source-separated from garbage, refuse and similar solid waste. The residual from source separated recyclables is MSW.

"Natural background" means the concentration of chemical, physical, biological, or radiological substances consistently present in the environment that has not been influenced by regional or localized human activities. Metals at concentrations naturally occurring in bedrock, sediments and soils due solely to the geologic processes that formed the materials are natural background. In addition, low concentrations of other persistent substances due solely to the global use or formation of these substances are natural background.

"New solid waste handling unit" means a solid waste handling unit that begins operation or facility construction, and significant modifications to existing solid waste handling units, after the effective date of this chapter.

"Nuisance odor" means any odor which is found offensive or may unreasonably interfere with any person's health, comfort, or enjoyment beyond the property boundary of a facility.

"On-farm" means activities taking place on any agricultural land under the control of the same entity including parcels that are not geographically contiguous but managed by the same entity

for agricultural production.

"One hundred-year flood plain" means any land area that is subject to one percent or greater chance of flooding in any given year from any source.

"Open burning" means the burning of solid waste materials in an open fire or an outdoor container without providing for the control of combustion or the control of emissions from the combustion.

"Organic feedstocks" means source separated organic materials suitable for vermicomposting, composting, anaerobic digestion, and other processes that transform waste organic materials into usable or marketable materials.

"Organic materials" means any solid waste that is a biological substance of plant or animal origin capable of microbial degradation. Organic materials include, but are not limited to, manure, yard debris, food waste, food processing wastes, wood waste, animal manure, and garden wastes.

"Overburden" means the earth, rock, soil, and topsoil that lie above mineral deposits.

"Permeability" means the ease with which a porous material allows liquid or gaseous fluids to flow through it. For water, this is usually expressed in units of centimeters per second and termed hydraulic conductivity.

"Permit" means an authorization issued by the jurisdictional health department which allows a person to perform solid waste activities at a specific location and which includes specific conditions for such facility operations.

"Person" means an individual, firm, association, copartnership, political subdivision, government agency, municipality, industry, public or private corporation, or any other entity whatever.

"Physical contaminants" as they relate to incoming feedstocks and compost quality means inorganic and organic constituents that are not readily decomposed during the composting process including, but not limited to, plastics, glass, textiles, rubber, leather, metal, ceramics, rocks, polystyrene, and wood pieces containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

"Pile" means any noncontainerized accumulation of solid waste that is used for treatment or storage.

"Plan of operation" means the written plan developed by an owner or operator of a facility detailing how a facility is to be operated during its active life.

"Point of compliance" means a point established in the groundwater by the jurisdictional health department as near a possible source of release as technically, hydrogeologically and geographically feasible.

"Post-closure" means the requirements placed upon disposal facilities after closure to ensure their environmental safety for at least a twenty-year period or until the site becomes stabilized (i.e., little or no settlement, gas production, or leachate generation).

"Post-closure plan" means a written plan developed by an owner or operator of a facility detailing how a facility is to meet the post-closure requirements for the facility.

"Post-consumer food waste" means source separated organic materials originally intended for human consumption including, but not limited to, vegetables, fruits, grains, meats and dairy products resulting from serving food. Post-consumer food waste is typically collected from cafeterias, homes, and restaurants.

"Preconsumer animal-based wastes" means source separated organic materials from animals such as meat, fat, dairy, or eggs that are a result of food preparation for human consumption or are products that did not reach the intended consumer. Preconsumer animal-based wastes are typically collected from food processing facilities and grocery stores.

"Preconsumer vegetative waste" means source separated organic materials from vegetables, such as pits, peels, and pomace from human food preparation, or vegetable products that did not reach the consumer. Preconsumer vegetative wastes are typically collected from food processing facilities and grocery stores.

"Premises" means a tract or parcel of land with or without habitable buildings.

"Private facility" means a privately owned facility maintained on private property solely for the purpose of managing waste generated by the entity owning the site.

"Processing" means an operation to convert a material into a useful product or to prepare it for reuse, recycling, or disposal.

"Product take-back center" means a retail outlet or distributor that accepts household hazardous waste of comparable types as the products offered for sale or distributed at that outlet.

"Public facility" means a publicly or privately owned facility that accepts solid waste generated by other persons;

"Putrescible waste" means solid waste which contains material capable of being readily decomposed by microorganisms and which is likely to produce offensive odors.

"Pyrolysis" means the process in which solid wastes are heated in an enclosed device in the absence of oxygen to vaporization, producing a hydrocarbon-rich gas capable of being burned for recovery of energy.

"Recyclable materials" means those solid wastes that are separated for recycling or reuse, including, but not limited to, papers, metals, and glass, that are identified as recyclable material pursuant to a local comprehensive solid waste plan.

"Recycling" means transforming or remanufacturing waste materials into usable or marketable materials for use other than landfill disposal or incineration. Recycling does not include collection, compacting, repackaging, and sorting for the purpose of transport.

"Representative sample" means a sample that can be expected to exhibit the average properties of the sample source.

"Reserved" means a section having no requirements and which is set aside for future possible rule making as a note to the

regulated community.

"Reusable containers" means containers that are used more than once to handle solid waste, such as garbage cans.

"Runoff" means any rainwater, leachate or other liquid that drains over land from any part of the facility.

"Run-on" means any rainwater or other liquid that drains over land onto any part of a facility.

"Scavenging" means the removal of materials at a disposal facility, or intermediate solid waste-handling facility, without the approval of the owner or operator and the jurisdictional health department.

"Seismic impact zone" means an area with a ten percent or greater probability that the maximum horizontal acceleration in lithified earth material, expressed as a percentage of the earth's gravitational pull, will exceed 0.10g in two hundred fifty years.

"Setback" means that part of a facility that lies between the active area and the property boundary.

"Sewage sludge" means solid, semisolid, or liquid residue generated during the treatment of domestic sewage in a treatment works. Sewage sludge includes, but is not limited to, domestic septage; scum or solids removed in primary, secondary, or advanced wastewater treatment processes; and a material derived from sewage sludge. Sewage sludge does not include ash generated during the firing of sewage sludge in a sewage sludge incinerator or grit and screenings generated.

"Soil amendment" means any substance that is intended to improve the physical characteristics of soil, except composted material, commercial fertilizers, agricultural liming agents, unmanipulated animal manures, unmanipulated vegetable manures, food wastes, food processing wastes, and materials exempted by rule of the department, such as biosolids as defined in chapter 70.95J RCW, Municipal sewage sludge--Biosolids and wastewater, as regulated in chapter 90.48 RCW, Water pollution control.

"Solid waste" or **"wastes"** means all putrescible and nonputrescible solid and semisolid wastes including, but not limited to, garbage, rubbish, ashes, industrial wastes, swill, sewage sludge, demolition and construction wastes, abandoned vehicles or parts thereof, contaminated soils and contaminated dredged material, and recyclable materials.

"Solid waste handling" means the management, storage, collection, transportation, treatment, use, processing or final disposal of solid wastes, including the recovery and recycling of materials from solid wastes, the recovery of energy resources from such wastes or the conversion of the energy in such wastes to more useful forms or combinations thereof.

"Solid waste handling unit" means discrete areas of land, sealed surfaces, liner systems, excavations, facility structures, or other appurtenances within a facility used for solid waste handling.

"Source separation" means the separation of different kinds of solid waste at the place where the waste originates.

"Storage" means the holding of solid waste materials for a

temporary period.

"Surface impoundment" means a facility or part of a facility which is a natural topographic depression, man-made excavation, or diked area formed primarily of earthen materials (although it may be lined with man-made materials), and which is designed to hold an accumulation of liquids or sludges. The term includes holding, storage, settling, and aeration pits, ponds, or lagoons, but does not include injection wells.

"Surface water" means all lakes, rivers, ponds, wetlands, streams, inland waters, salt waters and all other surface water and surface water courses within the jurisdiction of the state of Washington.

"Tank" means a stationary device designed to contain an accumulation of liquid or semisolid materials meeting the definition of solid waste or leachate, and which is constructed primarily of nonearthen materials to provide structural support.

"Throughput" means the amount of feedstocks in tons or cubic yards that a solid waste facility processes in a given amount of time, such as a calendar year. Throughput is identified by the conditions of exemption, the permit, or the plan of operations as approved by the jurisdictional health department or the department.

"Transfer station" means a permanent, fixed, supplemental collection and transportation facility, used by persons and route collection vehicles to deposit collected solid waste from ((~~offsite~~)) off-site into a larger transfer vehicle for transport to a solid waste handling facility.

"Treatment" means the physical, chemical, or biological processing of solid waste to make such solid wastes safer for storage or disposal, amenable for recycling or energy recovery, or reduced in volume.

"Twenty-five-year storm" means a storm of twenty-four hours duration and of such intensity that it has a four percent probability of being equaled or exceeded each year.

((~~**"Type 1 feedstocks"** means source-separated yard and garden wastes, wood wastes, agricultural crop residues, wax-coated cardboard, preconsumer vegetative food wastes, other similar source-separated materials that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances, human pathogens, and physical contaminants.~~

~~**"Type 2 feedstocks"** means manure and bedding from herbivorous animals that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances and physical contaminants when compared to a type 1 feedstock.~~

~~**"Type 3 feedstocks"** means meat and postconsumer source-separated food wastes or other similar source-separated materials that the jurisdictional health department determines to have a comparable low level of risk in hazardous substances and physical contaminants, but are likely to have high levels of human pathogens.~~

~~**"Type 4 feedstocks"** means mixed municipal solid wastes, postcollection separated or processed solid wastes, industrial solid wastes, industrial biological treatment sludges, or other~~

~~similar compostable materials that the jurisdictional health department determines to have a comparable high level of risk in hazardous substances, human pathogens and physical contaminants.~~))

"Universal wastes" means universal wastes as defined in chapter 173-303 WAC, Dangerous waste regulations. Universal wastes include, but may not be limited to, dangerous waste batteries, mercury-containing thermostats, and universal waste lamps generated by fully regulated dangerous waste generators or CESQGs.

"Unstable area" means a location that is susceptible to forces capable of impairing the integrity of the facility's liners, monitoring system or structural components. Unstable areas can include poor foundation conditions and areas susceptible to mass movements.

"Vadose zone" means that portion of a geologic formation in which soil pores contain some water, the pressure of that water is less than atmospheric pressure, and the formation occurs above the zone of saturation.

"Vector" means a living animal, including, but not limited to, insects, rodents, and birds, which is capable of transmitting an infectious disease from one organism to another.

"Vermicomposting" means the controlled and managed process by which live worms convert organic residues into dark, fertile, granular excrement.

"Waste tires" means any tires that are no longer suitable for their original intended purpose because of wear, damage or defect. Used tires, which were originally intended for use on public highways that are considered unsafe in accordance with RCW 46.37.425, are waste tires. Waste tires also include quantities of used tires that may be suitable for their original intended purpose when mixed with tires considered unsafe per RCW 46.37.425.

"Wetlands" means those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

"Wood derived fuel" means wood pieces or particles used as a fuel for energy recovery, which contain paint, bonding agents, or creosote. Wood derived fuel does not include wood pieces or particles coated with paint that contains lead or mercury, or wood treated with other chemical preservatives such as pentachlorophenol, copper naphthanate, or copper-chrome-arsenate.

"Wood waste" means solid waste consisting of wood pieces or particles generated as a by-product or waste from the manufacturing of wood products, construction, demolition, handling and storage of raw materials, trees and stumps. This includes, but is not limited to, sawdust, chips, shavings, bark, pulp, hogged fuel, and log sort yard waste, but does not include wood pieces or particles containing paint, laminates, bonding agents or chemical preservatives such as creosote, pentachlorophenol, or copper-chrome-arsenate.

"Yard debris" means plant material commonly created in the

course of maintaining yards and gardens and through horticulture, gardening, landscaping or similar activities. Yard debris includes, but is not limited to, grass clippings, leaves, branches, brush, weeds, flowers, roots, windfall fruit, and vegetable garden debris. Yard debris does not include sod (a combination of grass, roots, soil, and rocks) or soil.

"Zone of saturation" means that part of a geologic formation in which soil pores are filled with water and the pressure of that water is equal to or greater than atmospheric pressure.

AMENDATORY SECTION (Amending Order 99-24, filed 1/10/03, effective 2/10/03)

WAC 173-350-220 Composting facilities. (1) *Composting facilities - Applicability.*

(a) This section ((~~is applicable~~)) applies to all facilities or sites that treat solid waste by composting. This section ((~~is~~)) does not ((~~applicable~~)) apply to:

(i) ((~~Composting used as a treatment for dangerous wastes regulated under chapter 173-303 WAC, Dangerous waste regulation;~~)) Methods of managing organic materials, including composting, or recycling that are excluded from the solid waste handling standards in WAC 173-350-020;

(ii) Composting used as a treatment for ((~~petroleum~~)) contaminated soils regulated under WAC 173-350-320;

(iii) ((~~Treatment of liquid sewage sludge or biosolids in digesters at wastewater treatment facilities regulated under chapter 90.48 RCW, Water pollution control and chapter 70.95J RCW, Municipal sewage sludge--Biosolids;~~

~~(iv) Treatment of other liquid solid wastes in digesters regulated under WAC 173-350-330; and~~)) Anaerobic digesters regulated under WAC 173-350-250, or treatment of other liquid or solid wastes in digesters regulated under WAC 173-350-330;

(iv) Composting of bovine and equine carcasses for producers subject to RCW 70.95.306. Producers that fail to meet the conditions of RCW 70.95.306 will be required to obtain a solid waste handling permit from the jurisdictional health department and must comply with all other conditions of this chapter; and

(v) Composting biosolids when permitted under chapter 173-308 WAC, Biosolids management, when all of the following conditions are met:

(A) The department and jurisdictional health department agree in writing that a biosolids permit issued by the department will be adequate;

(B) When composting biosolids and other organic wastes together, the conditions of the biosolids permit issued by the department meet or exceed the requirements of this chapter and a solid waste permit is not required; and

(C) The jurisdictional health department does not otherwise find that a local solid waste permit is necessary.

(b) ((~~In accordance with RCW 70.95.305, the operation of the following activities in this subsection are subject solely to the requirements of (c) of this subsection and are~~)) Conditionally exempt facilities composting materials and volumes in Table 220-A must meet the conditions listed in Table 220-A, and (c) of this subsection to be conditionally exempt from solid waste handling permitting. Feedstocks not listed in Table 220-A must be approved by the department and jurisdictional health department. For the purposes of this subsection, "material on-site at any one time" includes feedstocks, active composting, curing piles, and composted materials. An owner or operator that does not comply with the terms and conditions of Table 220-A and (c) of this subsection is required to obtain a permit from the jurisdictional health department and ((~~shall~~)) must comply with all other applicable requirements of this chapter. ((~~In addition,~~)) Violations of the terms and conditions of Table 220-A and (c) of this subsection may be subject to the penalty provisions of RCW 70.95.315.

((~~(i) Production of substrate used solely on-site to grow mushrooms;~~

~~(ii) Vermicomposting, when used to process Type 1, Type 2, or Type 3 feedstocks generated on-site;~~

~~(iii) Composting of Type 1 or Type 2 feedstocks with a volume limit of forty cubic yards of material on-site at any time. Material on-site includes feedstocks, partially composted feedstocks, and finished compost;~~

~~(iv) Composting of food waste generated on-site and composted in containers designed to prohibit vector attraction and prevent nuisance odor generation. Total volume of the containers shall be limited to ten cubic yards or less;~~

~~(v) Agricultural composting when all the agricultural wastes are generated on-site and all finished compost is used on-site;~~

~~(vi) Agricultural composting when any agricultural wastes are generated offsite, and all finished compost is used on-site, and total volume of material is limited to one thousand cubic yards on-site at any time. Material on-site includes feedstocks, partially composted feedstocks, and finished compost; and~~

~~(vii) Agricultural composting at registered dairies when the composting is a component of a fully certified dairy nutrient management plan as required by chapter 90.64 RCW, Dairy Nutrient Management Act.~~

~~(viii) Composting of Type 1 or Type 2 feedstocks when more than forty cubic yards and less than two hundred fifty cubic yards of material is on-site at any one time.~~

~~(ix) Agricultural composting, when any of the finished compost is distributed offsite and when it meets the following requirements:~~

~~(A) More than forty cubic yards, but less than one thousand cubic yards of agricultural waste is on-site at any time; and~~

~~(B) Agricultural composting is managed according to a farm management plan written in conjunction with a conservation district, a qualified engineer, or other agricultural professional~~

~~able to certify that the plan meets applicable conservation practice standards in the *Washington Field Office Technical Guide* produced by the Natural Resources Conservation Service.~~

~~(x) Vermicomposting when used to process Type 1 or Type 2 feedstocks generated offsite. Total volume of materials is limited to one thousand cubic yards on-site at any one time.~~))

Table 220-A Terms and Conditions for Solid Waste Permit Exemptions

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(1)	● Post-consumer food waste ● Preconsumer vegetative food waste ● Preconsumer animal-based waste ● Yard debris ● Bulking agents ● Manufactured organics	Up to 20 cubic yards of all material on-site at any one time, not to exceed 100 cubic yards processed in a calendar year.	(a) Materials may be generated on- or off-site. Bulking materials such as wood chips may be generated off-site when used as part of the compost process. (b) Active composting must occur in containers designed to prevent vector attraction and nuisance odors.
(2)	● Yard debris ● Crop residues ● Manure and bedding ● Bulking agents	Up to 500 cubic yards of material on-site at any one time, not to exceed 2,500 cubic yards processed in a calendar year.	(a) Thirty days prior to operation, facilities managing more than 20 cubic yards of organic materials on-site at any one time must submit a notification of intent to operate as a conditionally exempt composter to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department. (b) Facilities managing more than 20 cubic yards of organic materials on-site at any one time and that distribute composted materials off-site must meet the following conditions: (i) Manage the operation to reduce pathogens as indicated by testing for fecal coliform or salmonella at limits set by Table 220-B; (ii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(iii) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(3)	● Agricultural wastes ● Yard debris ● Bulking agents	● Up to 1,000 cubic yards of agricultural wastes and bulking agents on-farm at any one time, and up to 50% of organic materials on-farm can be yard debris.	(a) Agricultural farms managing more than 20 cubic yards of imported yard debris on-site at any one time must meet the following conditions. Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt composter to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department; (b) If agricultural farm is only managing agricultural waste and not distributing composted material off farm, then notification in (3)(a)(i) of this table is not required. (c) Agricultural farms managing more than 20 cubic yards of organic materials on-farm at any one time and distributing composted material off-site must meet the following conditions: (i) Meet the conditions of (3)(a)(i) of this table; (ii) Manage operation to reduce pathogens as indicated by testing for fecal coliform or salmonella at limits set by Table 220-B of this section; (iii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and (iv) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(4)	● Agricultural wastes ● Bulking agents	No limits when only agricultural wastes and bulking agents are processed on-farm.	(a) For composting at a dairy, composting must occur as part of an updated dairy nutrient management plan as required by chapter 90.64 RCW, Dairy Nutrient Management Act. (b) For composting at a farm other than a dairy, composting must occur as part of an updated farm management plan written in conjunction with a conservation district, a qualified engineer, or other agricultural professional able to certify that the plan meets applicable conservation practice standards in the USDA *Washington Field Office Technical Guide*, Code 317, produced by the Natural Resources Conservation Service. (c) Facilities managing more than 20 cubic yards of organic materials on-farm at any one time and distributing composted material off farm must meet the following conditions: (i) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt composter to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department; (ii) Manage the operation to reduce pathogens as indicated by testing for fecal coliform or salmonella at limits set by Table 220-B of this section; (iii) Conduct compost analysis according to the requirements of Table 220-B. Compost testing frequency is based on volume of compost produced annually as required by subsection (4)(a)(x)(B) of this section; and (iv) Submit annual reports and results of composted material analysis to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

(c) Composting operations managing the types and volumes of materials identified in ((~~subsection (b) shall be managed according to~~)) Table 220-A must meet the following terms and conditions to maintain their exempt status:

(i) Comply with the performance standards of WAC 173-350-040;

(ii) ((~~Protect surface water and groundwater through the use of best management practices and all known available and reasonable methods of prevention, control, and treatment as appropriate. This includes, but is not limited to, setbacks from wells, surface waters, property lines, roads, public access areas, and site-specific setbacks when appropriate;~~)) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable;

(iii) Control nuisance odors to prevent migration beyond property boundaries;

(iv) Manage the operation to prevent attraction of flies, rodents, and other vectors;

(v) ((~~Conduct an annual analysis, prepared in accordance with the requirements of subsection (4)(a)(viii) of this section, for composted material that is distributed offsite from categorically exempt facilities described in subsection (1)(b)(vii) through (ix) of this section.~~)) Ensure that at least fifty percent of the composted material on-site is used within one year and composted material is not stockpiled for more than three years;

(vi) Prepare and submit an annual report to the department and the jurisdictional health department by April 1st of each calendar year for ((~~categorically~~)) exempt facilities ((~~described~~)) as required in ((~~subsection (1)(b)(vii) through (ix) of this section. Annual reports are not required for facilities operating under the permit exemption provided in (b)(vii) of this subsection if the composted material is not distributed offsite~~)) Table 220-A. The annual report ((~~shall~~)) must be on forms supplied by the department and ((~~shall~~)) must detail facility activities during the previous calendar year and ((~~shall~~)) must include the following information:

(A) Name and address of the facility;

(B) Calendar year covered by the report;

(C) Annual quantity and type of feedstocks received and compost produced, in cubic yards or tons;

(D) Annual quantity of composted material sold or distributed, in cubic yards or tons;

(E) Results of the annual analysis of composted material required by ((~~subsection (1)(c)(v) of this section~~)) Table 220-A; and

(F) Any additional information required by written notification of the department((~~.~~)); and

(vii) Allow the department or the jurisdictional health department to inspect the site at reasonable times((~~,~~

~~(viii) For activities under (b)(viii) through (x) of this subsection, and registered dairies where compost is distributed offsite, the department and jurisdictional health department shall be notified in writing thirty days prior to beginning any composting activity. Notification shall include name of owner or~~

~~operator, location of composting operation and identification of feedstocks~~)).

(2) *Composting facilities - Location standards* *(permit requirements)*. There are no specific location standards for composting facilities subject to this chapter; however, composting facilities must meet the requirements ((~~provided~~)) of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

Note: When considering compost facility location, please review the U.S. Department of Transportation Federal Aviation Advisory Circular. No. 150/5200-33B 2007.

(3) *Composting facilities - Design standards* *(permit requirements)*. ((~~The owner or operator of a composting facility shall prepare engineering reports/plans and specifications, including a construction quality assurance plan, to address the design standards of this subsection. Scale drawings of the facility including the location and size of feedstock and finished product storage areas, compost processing areas, fixed equipment, buildings, leachate collection devices, access roads and other appurtenant facilities; and design specifications for compost pads, storm water run-on prevention system, and leachate collection and conveyance systems shall be provided. All composting facilities shall be designed and constructed to meet the following requirements:~~

~~(a) When necessary to provide public access, all-weather roads shall be provided from the public highway or roads to and within the compost facility and shall be designed and maintained to prevent traffic congestion, traffic hazards, dust and noise pollution;~~

~~(b) Composting facilities shall separate storm water from leachate by designing storm water run-on prevention systems, which may include covered areas (roofs), diversion swales, ditches or other designs to divert storm water from areas of feedstock preparation, active composting and curing;~~

~~(c) Composting facilities shall collect any leachate generated from areas of feedstock preparation, active composting and curing. The leachate shall be conveyed to a leachate holding pond, tank or other containment structure. The leachate holding structure shall be of adequate capacity to collect the amount of leachate generated, and the volume calculations shall be based on the facility design, monthly water balance, and precipitation data. Leachate holding ponds and tanks shall be designed according to the following:~~

~~(i) For leachate ponds at registered dairies, the design and installation shall meet Natural Resources Conservation Service standards for a waste storage facility in the *Washington Field Office Technical Guide*.~~

~~(ii) For leachate ponds at composting facilities other than registered dairies, the pond shall be designed to meet the following requirements:~~

~~(A) Have a liner consisting of a minimum 30-mil thickness geomembrane overlying a structurally stable foundation to support the liners and the contents of the impoundment. High density~~

~~polyethylene geomembranes used as primary liners or leak detection liners shall be at least 60-mil thick to allow for proper welding. The jurisdictional health department may approve the use of alternative designs if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection;~~

~~(B) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation;~~

~~(C) Have freeboard equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided that other engineering controls are in place which prevent overtopping. These engineering controls shall be specified during the permitting process;~~

~~(D) Leachate ponds that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and which would be released by a failure of the containment dike shall be reviewed and approved by the dam safety section of the department.~~

~~(iii) Tanks used to store leachate shall meet design standards in WAC 173-350-330 (3)(b).~~

~~(d) Composting facilities shall be designed with process parameters and management procedures that promote an aerobic composting process. This requirement is not intended to mandate forced aeration or any other specific composting technology. This requirement is meant to ensure that compost facility designers take into account porosity, nutrient balance, pile oxygen, pile moisture, pile temperature, and retention time of composting when designing a facility.~~

~~(e) Incoming feedstocks, active composting, and curing materials shall be placed on compost pads that meet the following requirements:~~

~~(i) All compost pads shall be curbed or graded in a manner to prevent ponding, run-on and runoff, and direct all leachate to collection devices. Design calculations shall be based upon the volume of water resulting from a twenty-five-year storm event as defined in WAC 173-350-100;~~

~~(ii) All compost pads shall be constructed over soils that are competent to support the weight of the pad and the proposed composting materials;~~

~~(iii) The entire surface area of the compost pad shall maintain its integrity under any machinery used for composting activities at the facility; and~~

~~(iv) The compost pad shall be constructed of materials such as concrete (with sealed joints), asphaltic concrete, or soil cement to prevent subsurface soil and groundwater contamination;~~

~~(v) The jurisdictional health department may approve other materials for compost pad construction if the permit applicant is able to demonstrate that the compost pad will meet the requirements~~

~~of this subsection.~~)) Composting facilities must be designed and constructed to meet the requirements of this subsection.

(a) Composting facilities must be designed and constructed such that:

(i) The facility can be operated to meet the performance standard requirements in WAC 173-350-040; and

(ii) The facility can be operated to promote controlled, aerobic decomposition. This requirement is intended to ensure that compost facility designers take into account porosity, nutrient balance, pile oxygen, pile moisture, pile temperature, and retention time of composting when designing a facility. It is not intended to mandate force aeration or any other specific composting technology.

(b) The owner or operator of a composting facility must prepare and provide to the jurisdictional health department engineering reports, plans, and specifications that address the design standards of this subsection. The reports, plans, and specifications must be prepared by an engineer licensed in the state of Washington, and must include:

(i) An engineering report that presents the design basis and calculations for the engineered features of the facility including, but not limited to: Pad, impoundments, storm water management features, leachate management features, and aeration and emission control features as required by the permitting air authority where applicable. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;

(ii) Scale drawings of the facility including the location and size of feedstock and composted material storage areas, compost processing areas, fixed equipment, buildings, storm water management features where applicable, access roads, and other constructed areas and buildings integral to facility operation;

(iii) Design specifications for the engineered features of the facility including, but not limited to, pads, storm water management features, leachate management features, and aeration and emission management features as required by a permitting air authority where applicable; and

(iv) A construction quality assurance plan that describes monitoring, testing, and documentation procedures that will be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.

(c) When operations require public access, all-weather roads must be provided from the highway or roads to and within the compost facility and must be designed and maintained to prevent traffic congestion, traffic hazards, dust, and noise pollution.

(d) Compost facilities must manage storm water and leachate to meet the standards of this section and of any federal, state, and local water, and air quality permits.

(e) Composting facilities must minimize the production of leachate and runoff by designing storm water management features such as run-on prevention systems, which may include covered areas (roofs), diversion swales, ditches, or other features designed to divert storm water from areas of feedstock preparation, active

composting, and curing.

(i) Composting facilities must manage any leachate generated at the facility by providing leachate management features. The leachate management features include, but are not limited to, leachate collection, conveyance, and storage structures, or treatment systems. Leachate must be collected from areas of feedstock preparation, active composting, and curing, and be conveyed to a leachate storage structure or treatment system. Any discharges to ground that result in contaminants migrating to groundwater require a waste discharge permit under chapter 90.48 RCW, Water pollution control, prior to discharge. Discharges to ground that result in degradation of groundwater quality are prohibited under chapter 90.48 RCW, Water pollution control. Any discharge to sanitary sewer requires additional permitting by the local delegated authority or department;

(ii) Storm water and leachate collection and conveyance structures must be designed based on the volume of water resulting from a twenty-five-year storm event as defined in WAC 173-350-100;

(iii) Leachate storage structures such as ponds or tanks must be of adequate capacity to store the normal maximum volume of leachate generated by the facility. The normal maximum volume will be established based on the following conditions:

(A) Facility design;

(B) Normal climatic precipitation and evaporation data for the location of the facility;

(C) Monthly leachate reuse or removal; and

(D) A factor of safety to accommodate variability of actual conditions from normal conditions.

(iv) Leachate holding ponds and tanks must be designed according to the following:

(A) Leachate ponds at registered dairies must meet Natural Resources Conservation Service standards for a waste storage facility in the 2001 (revised June 2011) *Washington Field Office Technical Guide* (Code 313).

(B) Leachate ponds at composting facilities other than registered dairies must be designed to meet the following requirements:

(I) Have a liner consisting of a minimum 30-mil thickness geomembrane on a subgrade that provides sufficient bearing capacity to support the liner and the contents of the pond. A liner constructed with a high density polyethylene geomembrane must be at least 60-mil thick to allow for proper welding. The jurisdictional health department may approve the use of an alternative liner design if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection;

(II) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and capable of withstanding erosion from wave action, overfilling, or precipitation;

(III) Have freeboard (distance between the liquid level and

the top of the pond) equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided that other engineering controls are in place that prevent overtopping. These engineering controls must be specified during the permitting process; and

(IV) Leachate ponds that have the potential to impound more than ten-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and which would be released by a failure of the containment dike must be reviewed and approved by the dam safety section of the department.

(C) Tanks used to store leachate must meet design standards in WAC 173-350-330 (3)(b).

(f) Incoming feedstocks, active composting, and curing materials must be placed on pads that prevent contamination of soil or groundwater underlying or adjacent to the pads. Pads must meet the following requirements:

(i) All pads must be curbed or graded in a manner to prevent ponding, to control run-on and runoff, and to separately collect and convey all storm water and leachate to separate storage or holding systems. Storm water that is combined with leachate must be managed as leachate in accordance with this section;

(ii) All pads must be constructed on subgrades that provide sufficient bearing capacity to support the weight of the pad, the materials placed on them, and the equipment used in handling the materials;

(iii) The entire surface area of the pad must be designed to maintain its structural and hydraulic integrity against loads resulting from any machinery used for feedstock and compost handling activities, and from surface wear or damage caused by feedstock and compost handling, or by active composting at the facility;

(iv) The pad may be constructed of materials such as concrete (with sealed joints), asphaltic concrete, or soil cement that prevents subsurface soil and groundwater contamination;

(v) The jurisdictional health department may allow pads for compost facilities to be designed and constructed with materials other than those listed in (f)(iv) of this subsection, provided the applicant demonstrates in the engineering report to the jurisdictional health department's and the department's satisfaction that the alternative pad provides sufficient protection to meet the performance standards of this section and of WAC 173-350-040.

(4) *Composting facilities - Operating standards (permit requirements)*. The owner or operator of a composting facility ((~~shall~~)) must:

(a) Operate the facility to:

(i) Control air contaminants such as dust((~~,~~)) and nuisance odors((~~, and~~)) to prevent other contaminants ((~~to prevent migration of air contaminants~~)) from migrating beyond property boundaries in accordance with WAC 173-350-040(4);

(ii) Prevent the attraction of vectors;

(iii) ((~~Ensure that only feedstocks identified in the approved~~

~~plan of operation are accepted at the facility;~~)) Prevent the migration of agricultural pests identified by local pest and disease control boards, as applicable;

(iv) Ensure ((~~the facility operates under the supervision and control of a properly trained individual during all hours of operation, and~~)) access to the facility is restricted when the facility is closed;

(v) ((~~Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation;~~

~~(vi) Implement and document pathogen reduction activities when Type 2, 3 or 4 feedstocks are composted. Documentation shall include compost pile temperature and notation of turning as appropriate, based on the composting method used. Pathogen reduction activities shall at a minimum include the following:~~

~~(A) In vessel composting - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three days; or~~

~~(B) Aerated static pile - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three days; or~~

~~(C) Windrow composting - the temperature of the active compost pile shall be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for fifteen days or longer. During the period when the compost is maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher, there shall be a minimum of five turnings of the windrow; or~~

~~(D) An alternative method that can be demonstrated by the owner or operator to achieve an equivalent reduction of human pathogens;~~

~~(vii) Monitor the composting process according to the plan of operation submitted during the permitting process. Monitoring shall include inspection of incoming loads of feedstocks and pathogen reduction requirements of (a)(vi) of this subsection; and~~

~~(viii) Analyze composted material for:~~

~~(A) Metals in Table A at the minimum frequency listed in Table C. Compost facilities composting only Type 1 and Type 2 feedstocks are not required to test for molybdenum and selenium. Testing frequency is based on the feedstock type and the volume of feedstocks processed per year;~~

~~(B) Parameters in Table B at the minimum frequency listed in Table C. Testing frequency is based on the feedstock type and the volume of feedstocks processed per year;~~

~~(C) Nitrogen content at the minimum frequency listed in Table C; and~~

~~(D) Biological stability as outlined in United States Composting Council Test Methods for the Examination of Composting and Compost at the minimum frequency listed in Table C;~~

~~(E) The jurisdictional health department may require testing of additional metal or contaminants, and/or modify the frequency of testing based on historical data for a particular facility, to~~

~~appropriately evaluate the composted material.~~)) Ensure that only feedstocks identified in the approved plan of operation are accepted at the facility;

(vi) Ensure the facility operates under the supervision and control of a properly trained individual(s) during all hours of operation:

(A) Facility supervisors responsible for daily operation must receive training, or be able to document prior training, in the basics of composting within the first year of supervising the facility. Training must consist of classroom and hands-on course work and conclude with a certificate of completion that must be kept on-site at all times. Appropriate compost training can be obtained through organizations such as the Washington organic recycling council, the Solid Waste Association of North America, the U.S. Composting Council, or other training as approved by the jurisdictional health department.

(B) Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation. A trained supervisor may provide appropriate training to employees responsible for daily operations.

(vii) Implement and document pathogen reduction activities. Documentation must include compost pile temperatures representative of the composting materials, and notation of turnings as appropriate, based on the composting method used. Pathogen reduction activities must at a minimum include the following:

(A) In vessel composting - The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three consecutive days (seventy-two hours); or

(B) Aerated static pile must have a cover to ensure that pathogen reduction temperatures are reached and vectors are controlled - The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for three consecutive days (seventy-two hours); or

(C) Windrow composting - The temperature of the active compost pile must be maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher for fifteen days or longer. During the period when the compost is maintained at fifty-five degrees Celsius (one hundred thirty-one degrees Fahrenheit) or higher, there must be a minimum of five turnings of the windrow; or

(D) An alternative method of composting that can be demonstrated by the owner or operator to achieve an equivalent reduction of human pathogens.

(viii) Monitor the composting process according to the plan of operation submitted during the permitting process. Monitoring must include inspection of incoming loads of feedstocks and pathogen reduction requirements of (a)(vii) of this subsection;

(ix) Collect composted material samples for analysis that are representative of the pile. Use a sampling method such as

described in the U.S. Composting Council 2002 Test Methods for the Examination of Composting and Compost, Method 02.01-A through E, or as specified; and

(x) Analyze composted material for metals and other testing parameters listed in Table 220-B.

(A) The jurisdictional health department may require additional tests for metals and contaminants;

(B) Testing frequency is based on amount of composted material produced. A representative sample of composted material must be tested for every 5,000 cubic yards produced, or every three hundred sixty-five days, whichever is more frequent. The jurisdictional health department may modify the frequency of testing based on historical data for a particular facility;

(C) Composted material meeting the conditions of subsection (4)(a)(x) and (g)of this section can be stored off of a pad.

Table ((~~A - Metals~~)) 220-B Testing Parameters

Metals and other testing parameters	**Limit (mg/kg dry weight), unless otherwise specified**
Arsenic	((<=)) ≤ 20 ppm
Cadmium	((<=)) ≤ 10 ppm
Copper	((<=)) ≤ 750 ppm
Lead	((<=)) ≤ 150 ppm
Mercury	((<=)) ≤ 8 ppm
Molybdenum((+))	((<=)) ≤ 9 ppm
Nickel	((<=)) ≤ 210 ppm
Selenium((+))	((<=)) ≤ 18 ppm
Zinc	((<=)) ≤ 1400 ppm
Total Nitrogen	No limits
Physical contaminants	< 1 percent by weight total, not to exceed .10 percent film plastic
Sharps	0
Electrical conductivity	No range
Carbon to nitrogen ratio	No range
Moisture at 70°C	No range
Organic matter	No range
pH	5 - 10 (range)
Biological stability	Moderately unstable to very stable
Fecal coliform[1]	< 1,000 Most Probable Number per gram of total solids (dry weight)
OR	
Salmonella	< 3 Most Probable Number per 4 grams of total solids (dry weight)

[1]((~~Not required for composted material made from Type 1, Type 2 or a mixture of Type 1 and Type 2 feedstocks.~~)) Test for either fecal coliform or salmonella.

Note: Biosolids composters regulated under this chapter must communicate with the jurisdictional health department to determine if different testing parameters and testing frequencies are required.

((~~Table B - Other Testing Parameters~~

~~Parameter~~	~~Limit~~
~~Manufactured Inerts~~	~~< 1 percent~~
~~Sharps~~	~~0~~
~~pH~~	~~5 - 10 (range)~~
~~Fecal Coliform~~	~~< 1,000 Most Probable Number per gram of total solids (dry weight).~~
~~Salmonella~~	~~< 3 Most Probable Number per 4 grams of total solids (dry weight).~~

~~Table C - Frequency of Testing Based on Feedstocks Received~~

~~Feedstock Type~~	~~< 5,000 cubic yards~~	~~= or > 5,000 cubic yards~~
~~Type 1~~ ~~or~~ ~~Type 2~~	~~Once per year~~	~~Every 10,000 cubic yards or every six months whichever is more frequent~~
~~Type 3~~	~~Once per quarter (four times per year)~~	~~Every 5,000 cubic yards or every other month whichever is more frequent~~
~~Type 4~~	~~Every 1,000 cubic yards~~	~~Every 1,000 cubic yards or once per month whichever is more frequent~~))

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors and discharges((~~, which~~)) that may cause or lead to the release of waste to the environment or a threat to human health. Inspections ((~~shall~~)) must be conducted at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.

(c) For compost facilities with leachate holding ponds, conduct regular liner inspections at least once every five years, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process. The frequency of inspections ((~~shall~~)) must be specified in the operations plan and ((~~shall~~)) must be based on the type of liner, expected service

life of the material, and the site-specific service conditions((~~. The jurisdictional health department shall be given sufficient notice and have the opportunity to be present during liner inspections. An inspection log or summary shall be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records shall be available to the jurisdictional health department upon request.~~

~~(c) Maintain daily operating records of the following~~)):

(i) ((~~Temperatures and compost pile turnings for Type 2, Type 3 and Type 4 feedstocks;~~

~~(ii) Additional process monitoring data as prescribed in the plan of operation; and~~

~~(iii) Results of laboratory analyses for composted materials as required in (a)(viii) of this subsection. Facility inspection reports shall be maintained in the operating record. Significant deviations from the plan of operation shall be noted in the operating record. Records shall be kept for a minimum of five years and shall be available upon request by the jurisdictional health department.~~

~~(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st on forms supplied by the department. The annual report shall detail the facility's activities during the previous calendar year and shall include the following information:~~

~~(i) Name and address of the facility;~~

~~(ii) Calendar year covered by the report;~~

~~(iii) Annual quantity and type of feedstocks received and compost produced, in tons;~~

~~(iv) Annual quantity of composted material sold or distributed, in tons;~~

~~(v) Annual summary of laboratory analyses of composted material; and~~

~~(vi) Any additional information required by the jurisdictional health department as a condition of the permit.~~

~~(e) Develop, keep and abide by a plan of operation approved as part of the permitting process. The plan of operation shall convey to site personnel the concept of operation intended by the designer. The plan of operation shall be available for inspection at the request of the jurisdictional health department. If necessary, the plan shall be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation shall include the following:~~

~~(i) List of feedstocks to be composted, including a general description of the source of feedstocks;~~

~~(ii) A description of how wastes are to be handled on-site during the facility's active life including:~~

~~(A) Acceptance criteria that will be applied to the feedstocks;~~

~~(B) Procedures for ensuring that only the waste described will be accepted;~~

~~(C) Procedures for handling unacceptable wastes;~~

~~(D) Mass balance calculations for feedstocks and amendments to~~

~~determine an acceptable mix of materials for efficient decomposition;~~

~~(E) Material flow plan describing general procedures to manage all materials on-site from incoming feedstock to finished product;~~

~~(F) A description of equipment, including equipment to add water to compost as necessary;~~

~~(G) Process monitoring plan, including temperature, moisture, and porosity;~~

~~(H) Pathogen reduction plan for facilities that accept Type 2, Type 3, and Type 4 feedstocks;~~

~~(I) Sampling and analysis plan for the final product;~~

~~(J) Nuisance odor management plan (air quality control plan);~~

~~(K) Leachate management plan, including monthly water balance; and~~

~~(L) Storm water management plan;~~

~~(iii) A description of how equipment, structures and other systems are to be inspected and maintained, including the frequency of inspections and inspection logs;~~

~~(iv) A neighbor relations plan describing how the owner or operator will manage complaints;~~

~~(v) Safety, fire and emergency plans;~~

~~(vi) Forms for recordkeeping of daily weights or volumes of incoming feedstocks by type and finished compost product, and process monitoring results; and~~

~~(xvii) Other such details to demonstrate that the facility will be operated in accordance with this subsection and as required by the jurisdictional health department.~~)) Inspect the liner for degradation and ruptures of the liner material and for failure of any seams or joints in the liner material. If the maximum wetted extent of the liner geomembrane cannot be directly inspected visually, then the liner must be tested for leaks by electrical leak detection survey methods. If leaks, degradation, or ruptures of the liner material are detected, the liner must be repaired; and

(ii) The jurisdictional health department must be given sufficient notice and have the opportunity to be present during liner inspections. An inspection record must be kept at the facility or other convenient location if permanent office facilities are not on-site, for at least five years from the date of inspection. Inspection records must be available to the jurisdictional health department upon request.

(d) Maintain operating records of the following:

(i) Daily temperatures representative of compost piles;

(ii) Additional process monitoring data as prescribed in the plan of operation;

(iii) Results of analyses for composted materials as required in (a)(x) of this subsection and Table 220-B; and

(iv) Facility inspection reports must be maintained in the operating record. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the jurisdictional health department.

(e) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of

each calendar year on forms provided by the department. The annual report must detail the facility's activities during the previous calendar year and must include the following information:

(i) Name and address of the facility;

(ii) Calendar year covered by the report;

(iii) Annual quantity and type of feedstocks received and compost produced, in cubic yards or tons;

(iv) Annual quantity of composted material sold or distributed, in cubic yards or tons;

(v) Annual summary of laboratory analysis of composted material; and

(vi) Any additional information required by the jurisdictional health department as a condition of the permit.

(f) Develop, keep, and follow a plan of operation approved as part of the permitting process. The plan of operation must convey to site personnel the concept of operation intended by the designer. The plan of operation must be kept on-site and be available for inspection at the request of the jurisdictional health department. If necessary, the plan must be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:

(i) List of feedstocks to be composted, including a general description of the source of feedstocks. Feedstocks must be approved by the department or jurisdictional health department;

(ii) A plan to control air contaminants such as dust and nuisance odors to prevent contaminants from migrating beyond property boundaries in accordance with WAC 173-350-040(4), including:

(A) A plan to document nuisance odor complaints should they arise. The plan must include date and time of complaints, weather conditions, and operations at the facility at the time of the complaint;

(B) A progressive odor management plan that must include a description of facility and operational improvements that could be made if nuisance odors are identified beyond the facility's property boundary, as determined by the jurisdictional health department, the department, or the air authority. The description must address the receiving, composting, curing, and storage areas of the facility. Facilities will have eighteen months after the effective date of this chapter to complete the progressive odor management section of their plan of operation;

(C) A description of facility maintenance activities that encompass nuisance odor prevention and control, such as acquiring critical odor control backup equipment in the event of a breakdown, a schedule for purging aeration lines and changing biofilter media as appropriate, and a schedule for cleaning leachate ponds or leachate storage tanks as appropriate; and

(D) A description of how feedstocks with high moisture or the potential for high odors will be managed to reduce nuisance odors upon receipt, and through the composting process.

(iii) A description of how wastes and organic materials including incoming feedstocks, composting, curing, and composted materials are to be handled on-site during the facility's active

life, including:

(A) Maximum capacity in cubic yards for all materials on-site at any one time. The jurisdictional health department may require cumulative capacity for materials or separate capacities for incoming feedstocks, composting, curing, and composted materials, or any combination;

(B) Throughput in tons or cubic yards of solid waste feedstocks processed in a given amount of time. The jurisdictional health department may require monthly or annual throughput;

(C) Procedures and criteria for ensuring that only the feedstocks described will be accepted. This includes a plan for rejecting feedstocks contaminated with greater than five percent physical contaminants by volume, or a plan to accept and separate contaminated loads from noncontaminated loads, and reduce physical contaminants to an acceptable level prior to composting;

(D) Procedure to reduce physical contaminants in composted material to meet testing parameters in Table 220-B. Grinding to reduce the size of physical contaminants does not meet the requirements of this section;

(E) Procedures for handling unacceptable wastes;

(F) Mass balance calculations for feedstocks and amendments to determine an acceptable mix of materials for efficient decomposition;

(G) Material flow plan describing general procedures to manage all materials on-site from incoming feedstock to composted material;

(H) A description of equipment, including equipment to add water to compost as necessary;

(I) Compost process monitoring plan, including compost mix (carbon to nitrogen ratio), temperature, moisture, and porosity;

(J) Pathogen reduction plan;

(K) Representative sampling and analysis plan for the composted material such as described in the 2002 U.S. Composting Council Test Methods for the Examination of Composting and Compost Method 02.01-A through E;

(L) Leachate management plan, including monthly precipitation and evaporation data, and if applicable, monthly leachate reuse or removal; and

(M) Storm water management plan.

(iv) A description of how equipment, structures, and other systems are to be inspected and maintained, including the frequency of inspections and inspection logs;

(v) A description of how facility staff will receive appropriate training in the operation of the facility, including how they will be trained to identify nuisance odors and how to correct them;

(vi) A community relations plan describing how the owner or operator will document and manage complaints;

(vii) Safety, fire, and emergency plans;

(viii) Forms for recordkeeping of daily volumes or weights of incoming feedstocks by type, outgoing composted material, and process monitoring results; and

(ix) Other details to demonstrate that the facility will be

operated in accordance with this subsection and as required by the jurisdictional health department.

(g) Manage composted material piles that have met the testing parameters in Table 220-B in the following manner:

(i) Comply with the performance standards of WAC 173-350-040; and

(ii) Minimize and control runoff from composted material piles through the use of covers, diversion swales, berms, ditches, or other features designed to prevent runoff and divert storm water from compost material; and

(iii) Minimize odor by maintaining porosity of composted material piles and managing moisture levels in composted material piles, not to exceed sixty percent moisture.

(5) *Composting facilities - Groundwater monitoring requirements (permit requirements)*. There are no specific groundwater monitoring requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements ((~~provided~~)) of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

(6) *Composting facilities - Closure requirements* (permit requirements). The owner or operator of a composting facility ((~~shall~~)) must:

(a) Notify the jurisdictional health department sixty days in advance of closure. At closure, the facility owner or operator is financially responsible for the removal of all solid waste, including but not limited to, raw or partially composted feedstocks, composted material and leachate from the facility ((~~shall be removed~~)). The materials must be sent to another facility that ((~~conforms~~)) complies with the applicable regulations for handling the waste.

(b) Develop, keep, and ((~~abide by~~)) follow a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan ((~~shall~~)) must include methods of removing solid waste, leachate, and other organic materials from the facility. For planning purposes, assume that the facility is at full, permitted capacity at the time of closure.

(7) *Composting facilities - Financial assurance requirements (permit requirements)*. There are no specific financial assurance requirements for composting facilities subject to this chapter; however, composting facilities must meet the requirements ((~~provided~~)) of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

(8) *Composting facilities - Permit application contents* (permit requirements). The owner or operator of a composting facility ((~~shall~~)) must obtain a solid waste permit from the jurisdictional health department. All applications for permits ((~~shall~~)) must be submitted in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each application for a permit ((~~shall~~)) must contain:

(a) Engineering reports((~~/~~)), plans, and specifications that

address the design standards of subsection (3) of this section;

(b) A plan of operation meeting the requirements of subsection (4) of this section; and

(c) A closure plan meeting the requirements of subsection (6) of this section.

(9) *Composting facilities - Construction records (permit requirements)*. Within thirty days of completing construction, the owner or operator of a composting facility ((~~shall~~)) must provide copies of the construction record drawings for engineered facilities at the site and a report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan, to the jurisdictional health department and the department. Facilities ((~~shall~~)) must not ((~~commence operation~~)) begin operating until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report((~~/~~)), plans, and specifications and has approved the construction documentation in writing.

(10) *Composting facilities - Designation of composted materials (permit requirements)*. When used on-site or distributed off-site, composted materials meeting the ((~~limits for metals in Table A and the~~)) testing parameters of Table 220-B ((~~of this section, and having a stability rating of very stable, stable, or moderately unstable as determined by the analysis required in subsection (4)(a)(viii)(D) of this section, shall no longer be considered a solid waste and shall~~)) are no longer ((~~be~~)) subject to this chapter. Composted materials that do not meet these ((~~limits are still considered solid waste and~~)) requirements are subject to management under chapter 70.95 RCW, Solid waste management--Reduction and recycling.

NEW SECTION

WAC 173-350-225 Other organic material handling activities. (1) In accordance with RCW 70.95.305, activities identified in this section are exempt from solid waste handling permitting when in compliance with the terms and conditions of this section. Any person engaged in the activities in this section that does not comply with the terms and conditions of this section is required to obtain a permit from the jurisdictional health department in accordance with the requirements of WAC 173-350-490. In addition, violations of the terms and conditions of this subsection may be subject to the penalty provisions of RCW 70.95.315.

Table 225-A Terms and Conditions for Solid Waste Permit Exemptions

	Organic Materials	Volume	Specific Requirements for Activity or Operation
(1)	● Postconsumer food waste ● Preconsumer vegetative food waste ● Preconsumer animal-based waste ● Yard debris ● Crop residues ● Manure and bedding ● Bulking agents	Up to 20 cubic yards of material generated on- or off-site, or up to 1000 cubic yards of material generated on-site at any one time.	Facilities must be managed to promote vermicomposting, and: (a) Thirty days prior to operation, facilities managing more than 20 cubic yards of organic materials on-site at any one time must submit a notification of intent to operate as a conditionally exempt vermicomposter to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department. (b) Facilities managing more than 20 cubic yards of organic materials on-site at any one time and that distribute materials off-site must submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(2)	● Preconsumer vegetative food waste ● Yard debris ● Crop residues ● Manure and bedding ● Bulking agents	Up to 1000 cubic yards of material on-site at any one time.	Facilities must be managed to promote vermicomposting, and: (a) Thirty days prior to operation, facilities managing more than 20 cubic yards of organic materials on-site at any one time must submit a notification of intent to operate as a conditionally exempt vermicomposter to the jurisdictional health department and the department. Notice of intent must be submitted on a form provided by the department. (b) Facilities managing more than 20 cubic yards of organic materials on-site at any one time and that distribute materials off-site must submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.
(3)	● Postconsumer food waste ● Preconsumer vegetative food waste ● Preconsumer animal-based waste ● Yard debris ● Crop residues ● Manure and bedding ● Bulking agents	Other conversion technologies managing up to 3000 gallons of liquid or semi-solid organic feedstocks on-site at any one time, when individual tanks or enclosed vessels have a capacity of ≤ 1000 gallons or 20 cubic yards of nonliquid organic feedstocks on-site at any one time.	Other conversion technologies managing more than 1000 gallons liquid or semi-solid or 10 cubic yards of nonliquid material must meet the following conditions: (a) Tanks used must comply with at least one of the following design conditions: (i) Surface impoundment and tank standards, WAC 173-350-330; or (ii) Other engineered design that the owner or operator can demonstrate complies with the conditions of WAC 173-350-040, and is approved by the department. (b) Thirty days prior to operation, facilities must submit a notification of intent to operate as a conditionally exempt facility to the jurisdictional health department and the department. Notification must be submitted on a form provided by the department. (c) Submit annual reports to the department and the jurisdictional health department by April 1st of each calendar year. Annual reports must be submitted on forms provided by the department.

	Organic Materials	Volume	Specific Requirements for Activity or Operation
			(d) For material being distributed off-site, the following conditions apply: (i) Sample and test material every 5,000 cubic yards or twice yearly, whichever is more frequent, to demonstrate it meets compost quality standards of WAC 173-350-220(4) (Table 220-B) before it is distributed for off-site use; or (ii) Ensure material meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW; or (iii) Send material to a compliant permitted or conditionally exempt compost facility for further treatment to meet compost quality standards; or (iv) Land apply material in accordance with WAC 173-350-230, Land application; or (v) Use material in accordance with WAC 173-350-200, Beneficial use permit exemption; or (vi) Process or manage material in an alternate manner approved by the department or the jurisdictional health department.

(2) Facilities managing under the rules and volumes of material described in Table 225-A above are conditionally exempt facilities when they meet the following conditions:

(a) Comply with the performance standards, WAC 173-350-040;

(b) Manage the operation to prevent attraction of flies, rodents, and other vectors;

(c) Control nuisance odors to prevent migration beyond property boundaries; and

(d) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable.

NEW SECTION

WAC 173-350-250 Anaerobic digesters. (1) *Anaerobic digesters - Applicability.* This section applies to all facilities or sites that treat solid waste by anaerobic digestion, except (a), (b), and (c) of this subsection:

(a) Storage or treatment of solid or liquid wastes in surface impoundments or tanks regulated under WAC 173-350-330;

(b) Anaerobic digesters regulated in accordance with chapter 90.48 RCW, Water pollution control; and

(c) Anaerobic digesters regulated in accordance with chapter 173-308 WAC, Biosolids management.

(2) *Anaerobic digester - Permit exemptions.* In accordance with RCW 70.95.305, anaerobic digester facilities processing the

types and volumes of materials identified in Table 250-A are subject solely to the requirements of Table 250-A and (b) of this subsection and are exempt from solid waste handling permitting. Feedstocks not listed in Table 250-A must be approved by the department. Violations of the terms and conditions of Table 250-A and (b) of this subsection may be subject to penalty provisions of RCW 70.95.315.

(a) An owner or operator that does not comply with the terms and conditions of Table 250-A and (b) of this subsection must:

- Obtain a solid waste handling permit from the jurisdictional health department; and
- Comply with all applicable requirements of this chapter.

Table 250-A Terms and Conditions for Exemptions

	Feedstocks	**Volumes**	**Conditions**
(1)	Livestock manure; organic feedstocks.	No limits when livestock manure is at least 50% of total feedstocks volume, and imported, nonmanure organic feedstocks are not greater than 30% of total feedstock volume.	(a) All imported organic feedstocks must be fed into the anaerobic digester within 36 hours;
	May include livestock manure that is imported, which means originating off of the farm or site where the anaerobic digester is being operated. For the purposes of this exemption (Table 250-A (1)), organic feedstocks do not include materials collected from municipal, commercial, or residential solid waste collection programs.		(b) All organic materials must be received and stored in a structure(s) that: (i) Complies with the Natural Resources Conservation Service's Practice Standard Code 313 in effect as of July 26, 2009, or other approved storage construction standard approved by the department or the jurisdictional health department; (ii) Is certified by a representative of the Natural Resources Conservation Service to be effective at protecting surface and groundwater; or

	Feedstocks	Volumes	Conditions
			(iii) Meets applicable construction industry standards adopted by the American Concrete Institute or the American Institute of Steel Construction in effect as of July 26, 2009; and (iv) Prevents migration of nuisance odors beyond property boundaries and minimizes attraction of flies, rodents, and other vectors; (c) All imported organic materials must be preconsumer; (d) If imported organic feedstocks are likely to contain animal by-products, they must be previously source separated at a facility licensed to process food by the United States Department of Agriculture, the United States Food and Drug Administration, the Washington state department of agriculture, or other applicable regulatory agency; (e) If imported organic feedstock contains bovine processing waste, it must be derived from animals approved by the United States Department of Agriculture Food Safety and Inspection Service and not contain any specified risk material, defined as: Skull, brain, trigeminal ganglia (nerves attached to brain and close to the skull exterior), eyes, spinal cord, distal ileum (a part of the small intestine), and the dorsal root ganglia (nerves attached to the spinal cord and close to the vertebral column) of cattle aged 30 months or older; (f) Imported organic feedstocks cannot contain sheep carcasses or sheep processing waste;

	Feedstocks	Volumes	Conditions
			(g) The anaerobic digester must be designed and operated in accordance with standards in the Natural Resources Conservation Service's Conservation Practice Standard, Code 366, in effect as of July 26, 2009; (h) Digestate must: (i) Be managed in accordance with a dairy nutrient management plan under chapter 90.64 RCW or a farm management plan developed under the Natural Resource Conservation Service's conservation planning process, that includes elements addressing management and use of digestate; or (ii) Meet compost quality standards of WAC 173-350-220 for pathogens, stability, nutrient testing, metals and other testing before it is distributed for off-site use, or be sent to an off-site permitted compost facility for further treatment to meet compost quality standards; or (iii) Be processed or managed in an alternate manner approved by the department. The owner or operator must submit an annual report to the department and the jurisdictional health department reporting the volume of nonmanure material in the anaerobic digester, and test results of digested fiber as described in Table 250-A (1)(h)(ii). Annual reports must be submitted on forms provided by the department and are due April 1st of each calendar year;

	Feedstocks	Volumes	Conditions
			(i) Digestate that is managed in accordance with the dairy nutrient management plan under chapter 90.64 RCW, or a farm management plan developed under the Natural Resource Conservation Service's conservation planning process, is no longer a solid waste when those plans include elements addressing management and use of digestate.
(2)	● Post-consumer food waste ● Preconsumer vegetative food waste ● Preconsumer animal-based waste ● Yard debris	3,000 gallons of liquid or semi-solid organic feedstocks on-site at any one time, when individual tanks have a capacity of ≤ 1,000 gallons, or 20 cubic yards of nonliquid organic feedstocks on-site at any one time.	(a) The anaerobic digester design must comply with at least one of the following three conditions: (i) Design and operating standards in the Natural Resources Conservation Service's Washington Conservation Practice Standard, Anaerobic Digester Code 366 in effect October 2010, or as specified by the department; or (ii) Surface impoundment and tank standards, WAC 173-350-330; or (iii) Other engineered design that the owner or operator can demonstrate complies with the conditions of WAC 173-350-040, and is approved by the department.

	Feedstocks	Volumes	Conditions
			(b) For facilities managing more than 1000 gallons or 10 cubic yards on-site at any one time, and if organic materials are received from off-site, the owner or operator must submit an annual report to the department and the jurisdictional health department. Annual reports must be on forms provided by the department and are due April 1st of each calendar year. The annual report must detail the facility's activities during the previous calendar year and must include: (i) Annual quantity in cubic yards or gallons, and type of feedstocks received; (ii) Annual quantity in cubic yards or gallons of digestate distributed if applicable; (iii) Annual summary of digestate analysis if digestate is distributed off-site; and (iv) Any additional information required by the department or the jurisdictional health department. (c) For digestate (solids, semi-solids or liquids) being distributed off-site, the following conditions apply: (i) Sample and test digestate solids every 5,000 cubic yards or twice yearly, whichever is more frequent, to demonstrate it meets compost quality standards of WAC 173-350-220(4) (Table 220-B) before it is distributed for off-site use; or (ii) Ensure digestate liquids or nonseparated digestate meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW; or

	Feedstocks	Volumes	Conditions
			(iii) Send digestate to a compliant permitted or conditionally exempt compost facility for further treatment to meet compost quality standards; or (iv) Land apply digestate in accordance with WAC 173-350-230, Land application; or (v) Use digestate in accordance with WAC 173-350-200, Beneficial use permit exemptions; or (vi) Process or manage digestate in an alternate manner approved by the department or the jurisdictional health department.

(b) The owner or operator of an anaerobic digester in compliance with all of the conditions of Table 250-A must also meet all of the following conditions in order to maintain exempt status:

(i) Receive, handle, and store all organic materials in a manner that complies with WAC 173-350-040, Performance standards;

(ii) Allow inspections by the department and/or jurisdictional health department at reasonable times to verify compliance with the conditions specified in this subsection;

(iii) Manage the operation to prevent the attraction of flies, rodents, and other vectors; and

(iv) Manage the operation to prevent the migration of agricultural pests identified by local horticultural pest and disease control boards, as applicable.

(v) For facilities managing more than 1000 gallons or 10 cubic yards on-site at any one time, notify the department and jurisdictional health department thirty days prior to operation. Notification must be on forms supplied by the department.

(3) *Anaerobic digester - Location standards (permit requirements).* There are no specific location standards for anaerobic digesters subject to this chapter; however, anaerobic digesters must meet the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

Note: When considering anaerobic digestion facility location, please review the U.S. Department of Transportation Federal Aviation Advisory Circular No. 150/5200-33B. 2007.

(4) *Anaerobic digester - Design standards (permit requirements).* Anaerobic digesters must be designed such that the facility can be operated to meet the performance standard requirements in WAC 173-350-040. The owner or operator of an anaerobic digester facility must:

(a) Prepare and provide to the jurisdictional health department engineering reports, plans, specifications, and a

construction quality assurance plan that address the standards of this subsection. The reports, plans, and specifications must be prepared by an engineer licensed in the state of Washington and must include:

(i) An engineering report that presents the design basis and calculations for the engineered features of the facility including, but not limited to, pads, impoundments, leachate management features (if applicable), digestate management features, storm water management features, and anaerobic digester features. The engineering report must demonstrate that the proposed design will meet the performance standards of this chapter;

(ii) Scale drawings of the facility including the location and size of feedstock storage areas, fixed equipment, buildings, leachate management features (if applicable), digestate management features, storm water management features, access road and other constructed areas, and buildings integral to facility operation;

(iii) Design specifications for the engineered features of the facility including, but not limited to, pads, storm water management features, leachate management features (if applicable), digestate management features, and an anaerobic digester design that demonstrates all structures, containers, tanks, and/or surface impoundments will meet the requirements of this section, and of any federal, state, or local water and air quality permits; and

(iv) A construction quality assurance plan that describes monitoring, testing and documentation procedures that must be performed during construction of the facility to ensure the facility is constructed in accordance with the approved design.

(b) Provide all weather roads from the public highway to and within the facility when operations require public access. Roads must be designed and maintained to prevent traffic congestion, traffic hazards, dust and noise pollution.

(c) Design waste receiving areas, digesters, digestate management features, storm water, and leachate management features (if applicable), to prevent contamination of air, soil, surface water, and groundwater.

(i) Feedstock, leachate (if applicable), and digestate receiving and storage areas must either be in tanks or surface impoundments meeting the requirements of this section, or be on pads to prevent contamination of air, soil, surface water, and groundwater underlying or adjacent to receiving and storage areas;

(ii) Pads must meet the following requirements:

(A) All pads must be curbed or graded in a manner to prevent ponding, control run-on and runoff, and separately collect and convey all storm water and leachate to separate storage or holding systems. Storm water that is combined with leachate must be treated as leachate in accordance with this section;

(B) All pads must be constructed on subgrades that provide sufficient bearing capacity to support the weight of the pad, the materials placed on them, and the equipment used in handling the materials;

(C) The entire surface area of the pad must be designed to maintain its structural and hydraulic integrity against loads resulting from feedstock and digestate storage, machinery used for

feedstock handling, and against surface wear or damage caused by feedstock and digestate handling and storage;

(D) The pad may be constructed of materials such as concrete (with sealed joints) or asphaltic concrete that prevents subsurface soil and groundwater contamination; and

(E) The jurisdictional health department may allow pads to be designed and constructed with materials other than those listed in (c)(ii)(D) of this subsection, provided the applicant demonstrates in the engineering report to the jurisdictional health department's satisfaction that the alternative pad provides sufficient protection to meet the performance standards of this section and of WAC 173-350-040.

(iii) The anaerobic digester design must comply with one of the following three conditions:

(A) Design criteria in the Natural Resources Conservation Service's Washington Conservation Practice Standard, Anaerobic Digester Code 366 in effect October 2010, or other effective date as specified by the department; or

(B) Surface impoundment and tank design standards, WAC 173-350-330(3); or

(C) Other engineered design that the owner or operator can demonstrate complies with the conditions of WAC 173-350-040 to the jurisdictional health department's and the department's satisfaction. Written consent from the jurisdictional health department and the department constitutes approval.

(iv) Storm water management features must divert storm water from feedstock receiving and storage areas, and from digestate collection and storage areas. Features may include, but are not limited to, run-on prevention systems, berms, diversion swales, ditches, and other features;

(v) Leachate management features may include, but are not limited to, runoff prevention systems, leachate collection, conveyance, storage structures, and treatment systems;

(vi) Leachate (if applicable) must be contained or collected. Any discharges to ground that result in contaminants migrating to groundwater require a waste discharge permit under chapter 90.48 RCW, Water pollution control, prior to discharge. Discharges to ground that result in degradation of groundwater quality are prohibited under chapter 90.48 RCW, Water pollution control. Any discharge to sanitary sewer requires additional permitting by the local delegated authority or department;

(vii) Leachate ponds or tanks, or digestate liquid storage in ponds or tanks must meet one of the following conditions:

(A) Ponds must meet Natural Resources Conservation Service Standard for a waste storage facility in the 2001 *Washington Field Office Technical Guide 313* (revised June 2011); or

(B) Ponds must have a liner consisting of a minimum 30-mil thickness geomembrane on a subgrade that provides sufficient bearing capacity to support the liner and the contents of the pond. A liner constructed with a high density polyethylene geomembrane must be at least 60-mil thick to allow for proper welding; and

(I) Have dikes and slopes designed to maintain their structural integrity under conditions of a leaking liner and

capable of withstanding erosion from wave action, overfilling, or precipitation; and

(II) Have freeboard (distance between the liquid level and the top of the pond) equal to or greater than eighteen inches to avoid overtopping from wave action, overfilling, or precipitation. The jurisdictional health department may reduce the freeboard requirement provided that other engineering controls are in place that prevent overtopping. These engineering controls must be specified during the permitting process; or

(C) The jurisdictional health department may approve the use of an alternative liner design if the owner or operator can demonstrate during the permitting process that the proposed design will prevent migration of solid waste constituents or leachate into the ground or surface waters at least as effectively as the liners described in this subsection; or

(D) Tanks used to store leachate or digestate liquid must meet design standards in WAC 173-350-330 (3)(b).

(viii) Leachate ponds and digestate liquid storage that have the potential to impound more than 10-acre feet (three million two hundred fifty-nine thousand gallons) of liquid measured from the top of the dike and that would be released by a failure of the containment dike must be reviewed and approved by the department's dam safety section.

(5) *Anaerobic digester - Operating standards (permit requirements).* The owner or operator of an anaerobic digester must operate in compliance with the performance standards of WAC 173-350-040 or Natural Resource Conservation Service Practice Standard Code 366 as applicable, and:

(a) Operate the facility to:

(i) Control air contaminants, such as dust and nuisance odors, to prevent these and other contaminants from migrating beyond property boundaries;

(ii) Prevent the attraction of vectors;

(iii) Prevent the migration of agricultural pests identified by the local horticultural pest and disease control boards as applicable;

(iv) Confine organic materials prior to and after processing to specifically designated areas, meeting the applicable standards of this section;

(v) Ensure that dangerous waste is not accepted, treated, or stored;

(vi) Ensure the facility operates under the supervision and control of a properly trained individual during hours of operation when facility staffing is required;

(vii) Ensure facility employees are trained in appropriate facility operations, maintenance procedures, and safety and emergency procedures according to individual job duties and according to an approved plan of operation; and

(viii) Restrict access to the facility when the facility is closed.

(b) Inspect the facility to prevent malfunctions and deterioration, operator errors, and discharges that may lead to the release of wastes to the environment or cause a threat to human

health. The owner or operator must conduct these inspections as needed, but at least weekly, unless an alternate schedule is approved by the jurisdictional health department as part of the permitting process.

(c) Maintain operating records of the following:

(i) Process monitoring data as described in the plan of operation;

(ii) The quantity in gallons or cubic yards, and types of feedstocks received;

(iii) Results of analysis for digestate that is sold or distributed, according to subsection (5)(e) of this section; and

(iv) Facility inspection reports. Significant deviations from the plan of operation must be noted in the operating record. Records must be kept for a minimum of five years and must be available upon request by the jurisdictional health department.

(d) Prepare and submit a copy of an annual report to the jurisdictional health department and the department by April 1st of each calendar year for activities during the previous calendar year. Annual reports must be submitted on forms provided by the department and must include:

(i) Annual quantity and type of feedstocks received;

(ii) Annual quantity of digestate distributed if applicable;

(iii) Annual summary of digestate analysis as applicable, if digestate is distributed off-site; and

(iv) Any additional information required by the department or the jurisdictional health department.

(e) If distributing digestate (solids, semi-solids, or liquids) off-site, produce and manage the product so that it does not harm human health or the environment; and:

(i) Test representative samples of digestate solids every 5,000 cubic yards to demonstrate it meets compost quality standards in WAC 173-350-220(4) (Table 220-B). An alternate testing frequency may be required or approved by the jurisdictional health department; or

(ii) Ensure digestate meets the conditions for a commercial fertilizer as applicable in chapter 15.54 RCW; or

(iii) Send digestate to a permitted compost facility for further processing; or

(iv) Land apply digestate in accordance with WAC 173-350-230, Land application; or

(v) Use digestate in accordance with WAC 173-350-200, Beneficial use permit exemption; or

(vi) Apply digestate on agricultural lands at agronomic rates in accordance with a dairy nutrient management plan or a nutrient management plan; or

(vii) Manage digestate in an alternate manner as approved by the jurisdictional health department and the department.

(f) Develop, keep, and abide by a plan of operation approved as part of the permitting process. The plan must describe the facility's operation and must convey to site operating personnel the concept of operation intended by the facility designer. The plan of operation must be kept on-site and available for inspection at the request of the jurisdictional health department. When

necessary, the plan must be modified with the approval, or at the direction of the jurisdictional health department. Each plan of operation must include the following:

(i) A description of the types of feedstocks to be handled at the facility. Feedstocks must be approved by the department or jurisdictional health department;

(ii) Procedures for ensuring that only feedstocks described will be accepted;

(iii) Procedures for handling unacceptable wastes;

(iv) A plan for processing digestate to meet the requirements of (e) of this subsection, if distributing digestate off-site;

(v) A nutrient management plan for agricultural lands and farm lands (as described in RCW 84.34.020) if using digestate on-site;

(vi) A description of how facility staff will be appropriately trained;

(vii) A calculation of monthly capacity based on maximum volume (cubic yards or gallons) of all materials on-site at any one time. All materials on-site include feedstocks, digesting materials and digestate;

(viii) A material flow plan describing general procedures to manage all materials on-site. All materials on-site include incoming feedstock, digesting materials, and digestate;

(ix) An odor management plan including, but not limited to, the following components:

(A) Methods for treating emissions to reduce odors, if any;

(B) A community relations plan to address odor issues should they arise; and

(C) A description of facility and operational improvements that could be made, if nuisance odors are identified beyond the facility's property boundary, as determined by the jurisdictional health department, the department, or the permitting air authority. The description of operational improvements must address feedstock receiving, processing, and digestate storage areas of the facility.

(x) A description of how equipment, structures, and other systems will be inspected and maintained, including frequency of inspection and inspection logs. This description must include, but is not limited to:

(A) The groundwater monitoring system, if required;

(B) The overfilling prevention equipment, including details of filling and emptying techniques;

(C) The liners of surface impoundments and tanks, tank piping, and secondary containment, as applicable.

(xi) Safety, fire, and emergency plans including a spill prevention/response plan;

(xii) The forms used to record volumes (in cubic yards or gallons) of accepted feedstocks; and

(xiii) Other such details to demonstrate that the facility is operated in accordance with this chapter and as required by the jurisdictional health department.

(6) *Anaerobic digester - Groundwater monitoring requirements (permit requirements).* There are no specific groundwater monitoring requirements for anaerobic digestion facilities subject to this chapter; however, anaerobic digestion facilities must meet

the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

(7) *Anaerobic digester - Closure requirements.* The owner or operator of an anaerobic digester facility must:

(a) Develop, keep, and follow a closure plan approved by the jurisdictional health department as part of the permitting process. At a minimum, the closure plan must include removing all organic materials, including digestate, from the facility. For planning purposes, assume the facility is at full permitted capacity when it is closed;

(b) Notify the jurisdictional health department sixty days in advance of closure. At closure, the facility is financially responsible for the removal of all organic materials including, but not limited to, raw or partially digested feedstocks, and digestate from the facility. The materials must be sent to another facility that complies with the applicable regulations for handling the waste.

(8) *Anaerobic digester - Financial assurance requirements (permit requirements).* There are no specific financial assurance requirements for anaerobic digestion facilities subject to this chapter; however, anaerobic digestion facilities must meet the requirements of other federal, state, or local laws and regulations that apply under WAC 173-350-040(5).

(9) *Anaerobic digester - Permit application contents (permit requirements).* The owner or operator of an anaerobic digestion facility not exempt under subsection (2) of this section must obtain a solid waste permit from the jurisdictional health department. All applications for permits must be in accordance with the procedures established in WAC 173-350-710. In addition to the requirements of WAC 173-350-710 and 173-350-715, each permit application must contain:

(a) Engineering reports, plans, and specifications that address the design standards of subsection (4) of this section;

(b) A plan of operation that addresses the requirements of subsection (5) of this section; and

(c) A closure plan meeting the requirements of subsection (7) of this section.

(10) *Anaerobic digester - Construction records (permit requirements).* Facilities must not start operation until the jurisdictional health department has determined that the construction was completed in accordance with the approved engineering report, plans, and specifications and has approved the construction documentation in writing and issued a permit. Within thirty days of completing construction, the owner or operator of an anaerobic digestion facility must provide the following materials to the jurisdictional health department and the department:

(a) Copies of the construction record drawings for engineered facilities at the site; and

(b) A report documenting facility construction, including the results of observations and testing carried out as part of the construction quality assurance plan.